



Q.PEAK DUO AC

Q.PEAK DUO BLK ML-G10.C1+/AC

Q.PEAK DUO BLK ML-G10.XY+/AC

(where "X" = any letter between A to W,
where "Y" = any number between 1 to 9.)



Q.PEAK DUO AC

AC module powered by
Q.ANTUM DUO Z Technology

Monitoring & Control



The Q.OMMAND PRO App enables installers to monitor system performance at the module level, while the user-friendly Q.OMMAND HOME App provides homeowners with real-time PV production insights.

Superior Module Performance



Q.PEAK DUO AC is powered by Q.ANTUM DUO Z Technology, boosting module efficiency up to 21.1% which results in more power production over time.

Dependably Backed by One Warrantor



25-year product and performance warranty with an integrated module and microinverter solution from Qcells.

Streamlined Installation & Product Management



- Fast installation enabled by integrated Qcells microinverter
- Improved inventory management enabled by reduced SKU counts and one complete module and MLPE solution
- Seamlessly couples with Qcells' residential energy storage systems

Top Quality Customer Support



While the detachable microinverter simplifies on-site maintenance, Qcells' top-quality customer support offers rapid system troubleshooting.

Includes Domestic Content



- Q.PEAK DUO BLK ML-G10.C1+/AC contains U.S. manufactured components which can contribute to qualifying for the 10% domestic content bonus for applicable investment and production tax credits.¹ Module and microinverter both assembled in the USA by America's No.1 residential solar module manufacturer.

The ideal solution for:



Rooftop arrays on residential buildings

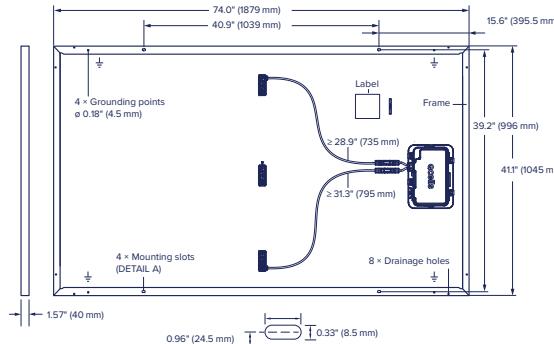
¹ This statement should not be relied on as tax advice and is subject to change based on changes made to the applicable rules and regulations. Please consult a qualified tax professional for specific guidance.

■ Description

The Q.PEAK DUO AC SERIES is a P-Type Q.ANTUM DUO Z Technology module with an integrated microinverter. The module, with its embedded microinverter, provides optimized power output while also acting as a rapid shutdown compliant solution for optimal system safety. The solution includes a microinverter, DC cables and a junction box, enabling a streamlined installation experience.

■ Mechanical Specification

Format	74.0 in \times 41.1 in \times 1.57 in (including frame) (1879 mm \times 1045 mm \times 40 mm)
Weight	52.36 lbs (23.75 kg)
Front Cover	0.13 in (3.2 mm) thermally pre-stressed ARC solar glass
Back Cover	Composite film
Frame	Black anodized aluminum
Cell	6 \times 22 monocrystalline Q.ANTUM solar half cells
Junction Box	2.09-3.98 in \times 1.26-2.36 in \times 0.59-0.71 in (53-101 mm \times 32-60 mm \times 15-18 mm), Protection class IP67, with bypass diodes
Cable	4 mm ² Solar cable; (+) \geq 31.3 in (795 mm), (-) \geq 28.9 in (735 mm)
Connector	Stäubli MC4; IP68



■ AC Output Electrical Characteristics

Q.MI.349B-G1 (Model Name)					
Peak Output Power	[VA]	366	Power Factor (adjustable)	0.85 leading...0.85 lagging	
Max Continuous Output Power	[VA]	349	Max. number of AC Modules per Q.HOME COMBINER 80 G1	[ea]	44 (Q.HOME COMBINER CB: Max 4)
Nominal (L-L) Voltage / Range	[V]	240/211 to 264	Max Units per 20 A (L-L) Branch Circuit	[ea]	11
Nominal Rated Output Current	[A]	1.45	Total Harmonic Distortion	[%]	<5
Nominal Frequency/Range	[Hz]	60/59.3 to 60.5	Overvoltage Class AC Port		III
Extended Frequency Range	[Hz]	50 to 66	Night-Time Power Consumption	[mW]	60
Power Factor at Rated Power		1.0	CEC Efficiency	[%]	97

■ DC Power Electrical Characteristics

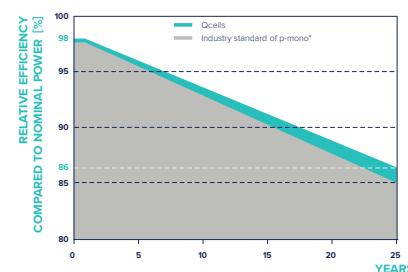
POWER CLASS	395	400	405	410	415
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC ¹ (POWER TOLERANCE +5W/-0W)					
Power at MPP ¹	P _{MPP} [W]	395	400	405	410
Short Circuit Current ¹	I _{SC} [A]	11.10	11.14	11.17	11.20
Open Circuit Voltage ¹	V _{OC} [V]	45.27	45.30	45.34	45.37
Current at MPP	I _{MPP} [A]	10.71	10.77	10.83	10.89
Voltage at MPP	V _{MPP} [V]	36.88	37.13	37.39	37.64
Efficiency ¹	η [%]	\geq 20.1	\geq 20.4	\geq 20.6	\geq 21.1

MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²

Minimum	Power at MPP	P _{MPP} [W]	296.3	300.1	303.8	307.6	311.3
Minimum	Short Circuit Current	I _{SC} [A]	8.95	8.97	9.00	9.03	9.05
Minimum	Open Circuit Voltage	V _{OC} [V]	42.69	42.72	42.76	42.79	42.83
Minimum	Current at MPP	I _{MPP} [A]	8.46	8.51	8.57	8.62	8.68
Minimum	Voltage at MPP	V _{MPP} [V]	35.03	35.25	35.46	35.68	35.89

¹ Measurement tolerances P_{MPP} \pm 3%; I_{SC}; V_{OC} \pm 5% at STC: 1000 W/m², 25 \pm 2°C, AM 1.5 according to IEC 60904-3 • ² 800 W/m², NMOT, spectrum AM 1.5

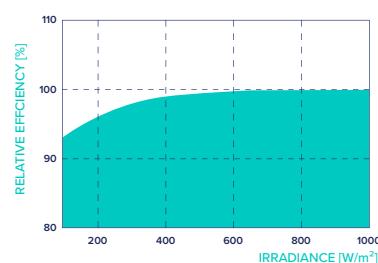
Qcells PERFORMANCE WARRANTY



At least 98% of nominal DC power during first year. Thereafter max. 0.5% degradation per year. At least 93.5% of nominal DC power up to 10 years. At least 86% of nominal DC power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Qcells sales organization of your respective country.

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m²).

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I _{SC}	α [%/K]	+0.04	Temperature Coefficient of V _{oc}	β [%/K]	-0.27
Temperature Coefficient of P _{MPP}	γ [%/K]	-0.34	Nominal Module Operating Temperature	NMOT	109 \pm 5.4 (43 \pm 3 °C)

^{*}Standard terms of guarantee for the 5 PV companies with the highest production capacity in 2021 (February 2021)

■ Properties for System Design

Maximum System Voltage	V _{SYS} [V]	1000 (UL)	PV Module Classification	Class II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating Based on ANSI/UL 61730	C/TYPE 2
Max. Design Load, Push/Pull ³	[lbs/ft ²]	113 (5400 Pa)/75 (3600 Pa)	Permitted Module Temperature on Continuous Duty ²	-40°F up to +140°F (-40°C up to +60°C)
Max. Test Load, Push/Pull ³	[lbs/ft ²]	169 (8100 Pa)/113 (5400 Pa)	Storage Temperature Range ²	-4°F up to +113°F (-20°C up to +45°C)

² According to the Q.MI.349B-G1, the maximum temperature is stated as "+140°F (60°C)", but the maximum temperature of the connected DC module is up to "+185°F (+85°C)".

³ See Installation Manual

■ Qualifications and Certificates

Base DC module (Q.PEAK DUO BLK ML-G10.XY+ solar module series, where "X" can be any letter between A to W and "Y" can be any number between 1 to 9.)

UL 61730-1 & UL 61730-2, CE-compliant;

IEC 61215:2016;

IEC 61730:2016.

This data sheet complies with DIN EN 50380.

Qcells Microinverter (Q.MI.349B-G1)

This product is UL listed as PV Rapid Shut Down Equipment

UL1741, UL 1741SA, UL 1741SB, CSA C22.2 No 107.

AC Module (Q.PEAK DUO BLK ML-G10.XY+/AC solar module series, where "X" can be any letter between A to W and "Y" can be any number between 1 to 9.)

UL 1741, CSA C22.2 No. 107, IEEE E1547.



■ Accessories (Additional parts, not included in AC module package)

Model	Category
UL9703 E493181	<p>Type 1: CAS-HQ-LO-1000 CAS-HQ-SH-650</p> <p>Type 2: CAS-HQ-LO-1300 CAS-HQ-SH-800</p>
UL3003 E533140	<p>CAB-HQ-KIT-200</p> <p>AC Cable (Raw) : 200 m cable without AC connector for the free design of AC PV installation. - Detail components : 200 meter (656 ft)</p>
UL6703 E479328	<p>CON-HQ-KIT-20</p> <p>AC Connector : To assemble the AC cable (CAB-HQ-KIT-200) by installer themselves. - Detail components : 20pcs Female + 20pcs Male</p>
UL9703 E493181	<p>ECAP-HQ-KIT-20</p> <p>End Cap : To close the end of AC cable. - Detail components : 20pcs Female + 20pcs Male</p>
UL9703 E493181	<p>UNT-HQ-TOOL-G1</p> <p>AC cable and DC cable Unlocking Tool</p>

Specifications subject to technical changes © Qcells Q.PEAK DUO BLK ML-G10.XY+/AC_395-415_2026-01_Rev02_NA



Qcells pursues minimizing paper output in consideration of the global environment.

Note: Installation instructions must be followed. Contact our technical service for further information on approved installation of this product.

Hanwha Q CELLS America Inc. 300 Spectrum Center Drive, Suite 500, Irvine CA, 92618 USA | TEL 1-(888) 249-7750 | EMAIL na.support@qcells.com | WEB www.qcells.com/us

qcells